NOTICE OF PREPARATION (NOP) SCOPING DOCUMENT FOR SHELL MARINE OIL TERMINAL NEW 30-YEAR LEASE ENVIRONMENTAL IMPACT REPORT (EIR)

(Industrial Lease PRC 4980.1)

July 21, 2004

1. Project Objective

Shell Oil Products US (Shell), is seeking approval from the California State Lands Commission (CSLC) for a new 30-year lease to continue current transfer operations at its crude oil and petroleum product marine terminal (Shell Terminal). The project objective is to maintain Shell Martinez Refinery operational viability. The purpose of this project is to maintain viability by continuing current wharf operations at the Shell Refinery. This project to maintain wharf operations is needed in order to continue Refinery operations. Without the use of the wharf, the refinery would not be viable and would be shut down. The acquisition of this wharf lease is required for the continued operation of the facility.

2. Project Location

The Shell Terminal is located approximately 0.6 miles west of the Benicia-Martinez Bridge on the south side of the Carquinez Strait. Immediately to the east of it lies the Tesoro wharf (AMORCO). State lands comprise approximately 5.03 acres of the terminal site (See Figures 1, 2 and 3).

3. Lease History

Shell's petroleum refinery and associated marine terminal, tankage and support facilities were constructed between 1915 and 1994. The CSLC originally leased the marine terminal parcel to Shell Oil Company in 1948. In 1974 a new lease was issued (CSLC PRC 4980.1) for fifteen years with 3 ten-year renewal options. In July 1998, Shell Oil Refining Company reassigned its original ownership of the company to Equilon Enterprises LLC, along with CSLC Lease PRC4980.1, and the CSLC accepted this reassignment. In the current renewal option/application process Shell has requested the CSLC to issue a new 30-year lease.

4. Description of Proposed Project

The Shell wharf and refinery have occupied the current location since 1915, processing hydrocarbon fuels and asphalt with an approximate average throughput of 155,000 barrels per day. Shell leases 19.26 acres of sovereign public land from the California State Lands Commission for the marine terminal -- a barge and tanker petroleum loading/unloading facility. The wharf facility is capable of operating year-round 24 hours a day, although actual operation depends on shipping and business demands. Shell's refinery operations use 850 acres of privately owned upland property immediately south of the wharf.

The T-shaped terminal consists of a 1950-foot long, 40-foot average wide, concrete wharf, connected to shore by a 1900-foot elevated wooden trestle supporting a 16-foot-wide roadway. The pile-supported pipe rack, 40-foot wide, parallels this wharf approach roadway. The wharf docking facility provides four berths -- two berths (#1 and #2) on the outer (north), and two berths (#3 and #4) on the inner (south) side -- equipped with pumps, pipelines, electrical utilities and other mechanical equipment. The current displacement limitation for Berth #1 is 142,000 long tons (L/T) and for Berth #2, 115,000 L/T. A 1000-foot tanker can moor at Berth #1 while Berth #2 moors a smaller vessel. The north side of the wharf normally maintains a minimum draft of minus 38 feet mean lower low water (MLLW), and historically has not been dredged. Berths #3 and #4, normally used for loading and unloading barges, are currently not in use because of accumulated silt.

Transfers to and from ships occur through hydraulically-operated hoses located on the wharf. Nitrogen is pumped through to empty the hoses before uncoupling from the ship. Each hose has a tight seal shut-off valve. Two hoses transfer recovered vapors by 12-inch pipeline to an upland oxidizer unit.

Oil containment booms are stored on each end of the wharf structure. Oil spill equipment located on the wharf includes 700-feet of boom on each mooring dolphin, a spill response/boom deployment boat and a drum skimmer and collection bladder.

5. Permits and Permitting Agencies

Shell asserts that its terminal currently meets all regulatory requirements, federal, state and local. Agencies that regulate existing operations and may regulate, approve or oversee aspects of the proposed Project, include but are not necessarily limited to:

- California State Lands Commission (CEQA lead agency)
- San Francisco Regional Water Quality Control Board
- San Francisco Bay Conservation and Development Commission
- California Department of Fish and Game
- US Coast Guard
- NOAA Fisheries (formerly called National Marine Fisheries Service)
- U.S. Fish and Wildlife Service
- U.S. Army Corps of Engineers
- Bay Area Air Quality Management District
- Contra Costa County
- City of Martinez

6. Scope of the EIR

Pursuant to the State CEQA Guidelines section 15060, the CSLC staff conducted a preliminary review of the proposed Project. Based on the potential for significant impacts, an EIR was deemed necessary. Issues to be discussed in the EIR are

provided below. The EIR will also consider alternatives to the project including the No Project Alternative, as required by the CEQA. Additional issues and/or alternatives may be identified at the public scoping meeting, in written comments, or as part of the EIR process. We invite comments and suggestions on the following significant impacts proposed for discussion in the EIR.

6.1 Potentially Significant Impacts to be Addressed in the EIR

The CSLC, acting as Lead Agency under the CEQA, has determined that: (1) there is a reasonable possibility of an oil spill occurring from the operation of the Shell Terminal loading facilities during the 30-year lease period; (2) such an oil spill could have a significant effect on the physical environment; and (3) other aspects of the project's operations could also have a significant effect on the environment.

Also provided are draft, proposed "Significance Criteria" (based on previous analyses of marine terminals and offshore loading facilities for which the CSLC has been the Lead Agency) that could be applied to each impact area. We invite comments and suggestions on these criteria.

6.1.1 Operational Safety / Risk of Accidents

Certain aspects of the existing environment and structural integrity of the Shell Terminal facilities may impact operational safety, or may influence impacts from an accident associated with the operation of the offshore portion of the Shell Terminal, including the transportation of crude oil and petroleum products to and from the offshore facilities. Additionally, exchange of petroleum cargoes at a marine terminal presents an inherent risk of accidents that may involve fire, explosions and/or spills. The EIR will address the potential adverse health consequences e.g., exposure to toxic and hazardous substances, fire, explosions or spills in conjunction with continued use of the facility. The analyses will include:

- A review of past and present terminal, vessel and operational characteristics including: throughput quantities and mix; barge size, age and design; frequency of barge visits; terminal and barge personnel requirements; technological advances; terminal management practices; operational condition of the equipment on the barge: and oil spill response capabilities;
- Projection of transportation requirements for crude oil and operational characteristics;
- Evaluation of alternatives for meeting future oil transportation needs in the safest and least environmentally damaging manner;
- Analysis of existing and proposed federal, state and local laws, regulations, plans and policies affecting marine terminal location and operations;
- Determination of potential hazard/impact footprint of the Terminal
- Assessment and evaluation of the safety of terminal operations, both human and technological including condition of the chain and anchor systems, with particular consideration of the environment in which it operates; and

- Assessment of the potential risk of terminal related accidents resulting in an oil spill or other damage to the environment and identification of feasible steps for eliminating or minimizing that risk.

Significance Criteria

A hazards and/or hazardous materials impact is considered significant if any of the following apply:

- If the existing facility does not conform to its oil spill contingency plans or other plans that are in effect; or if current or future operations may not be consistent with federal, state or local regulations. Conformance with regulations does not necessarily mean that there are not significant impacts;
- There is a potential for fires, explosions, releases of flammable or toxic materials, or other accidents from the Shell Terminal or from barges that could cause injury or death to members of the public;
- Existing and proposed emergency response capabilities are not adequate to effectively mitigate spills and other accident conditions.
- Continued operation of the project creates the need for one or more additional personnel to maintain the current level of fire protection and emergency response services.

Although the potential for oil or product spills will be discussed in this section, the potential impact of spills will also be analyzed in other, appropriate resource-related Sections e.g., Biological Resources, Water Quality, Commercial and Sports Fisheries, Land Use and Recreation.

6.1.2 Geological Resources

The Shell Terminal is located in proximity to several active faults. The facility would be susceptible to damage as a result of an earthquake on these nearby faults. Extension of the life of the existing facility could result in oil spills due to seismically induced ground failure or other geologic hazards, such as corrosion or excessive coastal erosion. Remediation of such spills would, in turn, potentially cause water quality impacts to Suisun Bay and San Francisco Bay.

Significance Criteria

Seismic effects could result in significant hazards to structures when not properly accounted for in facility design or construction. Impacts are considered significant if any of the following conditions apply:

- Settlement of the soil that could substantially damage structural components of the wharf;
- Ground motion due to a seismic event that could induce liquefaction, settlement, or a tsunami that could damage structural components;

- Deterioration of structural components of the wharf due to corrosion, weathering, fatigue, or erosion that could reduce structural stability;
- Increase in loading conditions, vessel size, or number of vessels that could overstress the existing facilities and reduce the structural stability of the wharf'; or
- Damage to petroleum pipelines and/or valves along the pipeways from any of the above conditions that could release crude oil into the environment.

6.1.3 Water Quality

The EIR will analyze the potential of impacts to water quality and to water column chemistry, in the Carquinez Strait, during Shell Terminal operations and from oil spills. The significance of impacts will be considered in the context of whether Shell Terminal operations would likely result in pollutant levels above ambient water quality and sediment levels that would exceed water quality objectives of the S.F. Bay Regional Water Quality Control Board or the State Water Resources Control Board.

The potential for accidental discharge into surface waters as crude oil flows between the refinery and the offshore terminal and is transported to and from the Shell Terminal by marine vessels will be examined. Oil spills could result from geologic hazards, mechanical failure, structural failure, or human error. Such spills could potentially result in water quality impacts to Carquinez Strait, Suisun Bay, San Francisco Bay, and the Pacific Ocean. Potential impacts to the marine environment include increased water column turbidity and the introduction of toxic contaminants into the water column. The EIR will analyze the potential for impacts from such accidents on water quality and marine organisms.

Significance Criteria

Impacts to marine water quality are considered significant if any of the following apply:

- The water quality objectives contained in the Water Quality Control Plan for the San Francisco Basin are exceeded;
- The water quality objectives in the California Ocean Plan are exceeded;
- The water quality criteria in the California Toxics Rule are exceeded;
- Project operations or discharges that change background levels of chemical and physical constituents or elevate turbidity producing long-term changes in the receiving environment of the site, area, or region, thereby impairing the beneficial uses of the receiving water occur; or
- Contaminant levels in the water column, sediment, or biota are increased to levels shown to have the potential to cause harm to marine organisms even if the levels do not exceed formal objectives in the Water Quality Control Plan.

6.1.4 Biological Resources

The area surrounding the wharf contains diverse and rich assemblages of resident marine flora and fauna. Issues associated with the lease for the Shell Terminal include:

- Its potential adverse effects on the on- and offshore environments in the event of an accidental oil spill or subsequent clean up activities, as well as fisheries losses resulting from discharge, oil spills, vessel traffic or conflicts with vessels;
- The potential for introduction of harmful, non-indigenous species into the surrounding marine environment; via ballast water discharge or hull fouling; and
- The potential for continued vessel traffic serving the terminal to, over time, cause deterioration of existing fish or wildlife habitats.

Significance Criteria

An impact on biological resources will be considered significant if any of the following apply:

- Any part of the population of a threatened, endangered, or candidate species is directly affected or if its habitat is lost or disturbed;
- A net loss occurs in the functional habitat value of: a sensitive biological habitat, including salt, freshwater, or brackish marsh; marine mammal haul-out or breeding area; eelgrass; river mouth; coastal lagoons or estuaries; seabird rookery; or Area of Special Biological Significance;
- The movement or migration of fish or wildlife is impeded; or
- A substantial loss occurs in the population or habitat of any native fish, wildlife, or vegetation or if there is an overall loss of biological diversity. Substantial is defined as any change that could be detected over natural variability.

6.1.5 Commercial and Sports Fisheries

The marine resources in the Suisun Bay and San Francisco Bay support commercial, recreational and sports fisheries.. Routine operations, spills, and other accidents would affect these activities. In addition, continued vessel traffic serving the Shell Terminal has the potential, over time, to cause deterioration of existing fish or wildlife habitats, thereby affecting commercial, sports and recreational fishing.

Significance Criteria

An impact to commercial and sport fisheries would be considered significant if:

- Project activities temporarily reduce any fishery in the vicinity by 10 percent or more during a season, or reduce any fishery by 5 percent or more for more than one season;
- Project activities affect kelp and aquaculture harvest areas by 5 percent or more; or
- Harvesting time is lost due to harbor closures, impacts on living marine resources and habitat, and equipment or vessel loss, damage, or subsequent replacement.

6.1.6 Land Use and Recreation

Continued use of the Shell Terminal may have effects on existing and planned land uses in the area, including existing and potential shoreline and water-related recreational use.

Significance Criteria

Land use/recreational impacts will be considered significant if the project would result in the following:

- Conflicts with existing or known future land uses, or adopted land use plans, policies, or ordinances;
- Result in conflicts with planning efforts to protect the recreational resources of the project area;
- Incompatible adjacent land uses as defined by planning documentation; or
- Residual impacts on sensitive shoreline lands, and/or water and non-water recreation due to a release of oil.

6.1.7 Air Quality

Air emissions from the Shell Terminal are regulated by the Bay Area Air Quality Management District (BAAQMD). The environmental analysis of the proposed project will evaluate emissions estimates against applicable significance criteria and in accordance with the BAAQMD Guidelines and permits. The EIR will analyze:

- The sources of emissions that would be associated with the project, including dredging operations, the types and amounts of different pollutants that could be emitted, and their duration of impact;
- Increases in emissions from projected vessel trafficand best estimate of throughput; and
- Potential impacts and mitigation measures associated with odor and toxic air contaminant emissions.

Significance Criteria

The air quality impacts of the Proposed Project would be significant if:

- Shell Terminal operations fail to comply with any condition of the BAAQMD Permit to Operate.
- Non-permitted emissions emissions could have a significant, adverse impact if they:
  - Contribute to an exceedance of localized carbon monoxide emissions in excess of the California Ambient Air Quality Standard (CAAQS) i.e., 20 parts per million (ppm) for 1 hour or 9 ppm for 8 hours;
  - Result in emissions which exceed the following emission thresholds:
    - Reactive Organic Gases (ROG), 15 tons/year, 80 lbs/day,
    - Nitrogen Oxides, 15 tons/year, 80 lbs/day, and
    - PM10 Particulates (suspended particulate matter 10 microns or less in

diameter), 15 tons/year, 80 lbs/day;

- Allow uses that create objectionable odors that would be considered a nuisance under a BAAQMD rule or regulation.
- Expose sensitive receptors (including residential areas) or the general public to substantial levels of toxic air contaminants or objectionable odors; or
- Potentially result in the accidental release of acutely hazardous air emissions.

6.1.8 Noise

The operation of the Shell Terminal produces stationary sources of noise associated with normal loading operation of vessels and other routine terminal operations such as noise generated by various pumps and operation of the vapor recovery system.

Significance Criteria

A noise impact is considered to be significant if:

- The project noise level, timing or duration exceed a local noise ordinances, or any applicable noise regulations promulgated on the state or federal level, including:
  - The Contra Costa County General Plan Noise Element maximum CNEL for Industrial land uses of 75 dBA;
  - The City of Martinez noise ordinance standard for industrial area offsite noise limit of 70dBA
- The project would increase the ambient noise level above ordinance-specified limits by more than 5 dBA (substantial increase), or by 3 dBA in areas already exceeding ordinance-specified limits

6.1.9 Vehicular and Rail Transportation

The Project is not expected to have significant effects on transportation or circulation in the area. However, the potential for impacts associated with routine operations and accident conditions during the transport of product for one or more of the alternatives will be examined.

Significance Criteria

Traffic impacts would be considered significant if any of the following apply:

- Project traffic or construction of the alternative must use an access road already at or exceeding Level of Service (LOS) E or brings a roadway down to LOS E;
- Project traffic or construction of the alternatives would result in a substantial safety hazard to motorists, bicyclists, or pedestrians;
- The proposed Project or construction of alternatives would restrict one or more lanes of a primary or secondary arterial during peak-hour traffic, thereby reducing its capacity and creating congestion; and/or

- Project implementation results in insufficient parking.

6.1.10 Cultural Resources

The CEQA Guidelines (Section 15064.5) define "historical resources" as follows:

> Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be an historical resource, provided the lead agency's determination is supported by substantial evidence in the light of the whole record. Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource has integrity and meets the criteria for listing on the California Register of Historical Resources as follows:
> (A) Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
> (B) Is associated with the lives of persons important in our past;
> (C) Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
> (D) Has yielded, or may be likely to yield, information important in prehistory or history.

Significance Criteria

Thresholds of significance for cultural resource impacts for the project are defined as situations where construction or operation of the project could:

- Result in damage to, the disruption of, or adversely affect a property that is listed in the California Register of Historical Resources (CRHR) or a local register of historical resources as per Section 5020.1 of the Public Resources Code.
- Cause damage to, disrupt, or adversely affect an important prehistoric or historic archaeological resource such that its integrity could be compromised or eligibility for future listing on the CRHR diminished.
- Cause damage to or diminish the significance of an important historical resource such that its integrity could be compromised or eligibility for future listing on the CRHR diminish.

6.1.11 Environmental Justice

The CSLC developed and adopted an Environmental Justice Policy to ensure equity and fairness in its own processes and procedures. This policy stresses equitable treatment of all members of the public and commits to consider environmental justice in its processes, decision-making, and regulatory affairs which is implemented, in part, through identification of, and communication with, relevant populations that could be

adversely and disproportionately impacted by CSLC projects or programs, and by ensuring that a range of reasonable alternatives is identified that would minimize or eliminate environmental impacts affecting such populations.

This portion of the EIR will analyze the distributional patterns of high-minority and low-income populations on a regional basis. The analysis will focus on whether the proposed Project's impacts will have the potential to affect area(s) of high-minority population(s) and low-income communities disproportionately, thereby creating an adverse environmental justice impact.

Significance Criteria

An environmental justice impact would be considered significant if the proposed Project would:

- Have a potential to disproportionately impact minority and/or low-income populations at levels exceeding the corresponding medians for Contra Costa County, where the project is located; or
- Result in a substantial disproportionate decrease in the employment and economic base of minority and/or low-income populations residing in Contra Costa County and/or immediately surrounding cities.

6.2 Cumulative Projects

Although vessels in transit are not a responsibility of Shell Terminal, an accidental spill/release of oil in the area could occur. Therefore, in accordance with the CEQA section 15130, the EIR will discuss the cumulative impacts of the proposed Project, considering the potential for repeated or buildup of other combined activities associated with continued operations over time, and address the likelihood of occurrence and severity of the potential impacts. The EIR will discuss other marine terminals operating in the area, and foreseeable projects in the general vicinity.

6.3 Preliminary Listing of Alternatives To Be Addressed in the EIR

The development of this portion of the EIR will utilize an alternative screening analysis which will: evaluate a reasonable range of alternatives, provide the basis for selecting alternatives that are feasible and reduce significant impacts associated with the proposed Project, and provide a detailed explanation of why other alternatives were rejected from further analysis.

The alternatives analysis may, in addition to the No Project Alternative, identify one or more of the following for further development. However, these are not to be considered a final determination of feasible alternatives that would be analyzed in the EIR.

6.3.1 No Project/No Action Alternative

Under the No Project Alternative, Shell Terminal's lease would not be renewed and the existing marine terminal would be abandoned in place or removed. A decision to

remove or abandon the marine terminal will be the subject of a subsequent application to the CSLC and subject to appropriate environmental review. Crude oil would be transported via existing onshore pipelines and through other Bay Area marine terminals.

For the purposes of this EIR, potential impacts of decommissioning are to be discussed only briefly. A decision to remove or abandon the Terminal would be the subject of a subsequent application to the SCLC with appropriate environmental review.

6.3.2 Construct a New Pipeline Alternative

The impacts associated with transporting crude oil to the Shell Refinery facilities via a newly constructed pipeline will be evaluated.

6.3.2 Use Existing Pipelines Alternative

The impacts associated with transporting crude oil to the Shell Refinery facilities through use of restored or existing pipelines will be evaluated.

6.3.4 Rail Transportation Alternative

The impacts of transporting crude oil using rail transportation may be assessed. This alternative would review proximity to existing rail lines and the impact of handling facilities construction.